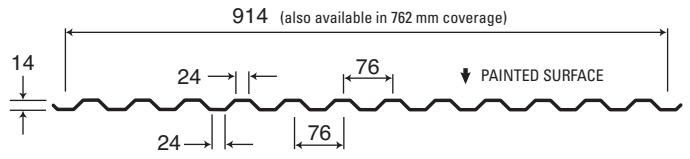
Ultima

Wall Cladding



ALL DIMENSIONS ARE IN MILLIMETERS

Section Properties

(Per Metre of Width)

Base Steel Thickness (mm)	Mass Z275 (kg/m^2)	Yield Stress (MPa)	Section Modulus Mid Span ($x 10^3 mm^3$)	Section Modulus Support ($x 10^3 mm^3$)	Deflection Moment of Inertia Mid Span ($x 10^6 mm^4$)	Mr (Nm) Mid Span	Mr (Nm) Support	Specified Web Crippling Data (kN) End P_{e1}	End P_{e2}	Interior P_{i1}	Interior P_{i2}
0.381	3.56	550	3.310	3.310	0.0248	1228.8	1228.8	2.70	0.68	5.18	0.88
0.457	4.45	230	2.309	2.309	0.0186	477.9	477.9	2.22	0.56	4.25	0.72
0.610	5.94	230	3.310	3.310	0.0248	685.2	685.2	4.10	1.02	7.82	1.33
0.762	7.42	230	4.077	4.077	0.0308	844.0	844.0	6.52	1.63	12.41	2.11

Load Table

Live Load Factor = 1.4; Importance Factor ($I_{W\text{-}SLS}$) = 0.75; Importance Factor ($I_{W\text{-}ULS}$) = 1.4

Maximum Specified Uniformly Distributed Loads in kPa

Span (mm)		1-Span Base Steel Thickness (mm) 0.381	0.457	0.610	0.762	2-Span Base Steel Thickness (mm) 0.381	0.457	0.610	0.762	3-Span Base Steel Thickness (mm) 0.381	0.457	0.610	0.762
610	S	18.87	7.34	10.52	12.96	18.87	7.34	10.52	12.96	23.59	9.17	13.15	16.20
	D	12.6	9.4	12.6	15.7	31.6	23.7	31.6	39.3	23.8	17.8	23.8	29.6
686	S	14.92	5.8	8.32	10.25	14.92	5.8	8.32	10.25	18.65	7.25	10.4	12.81
	D	8.86	6.64	8.86	11.04	22.19	16.64	22.18	27.63	16.72	12.54	16.72	20.82
762	S	12.09	4.7	6.74	8.31	12.09	4.7	6.74	8.31	15.12	5.88	8.43	10.38
	D	6.47	4.85	6.46	8.05	16.19	12.14	16.19	20.16	12.2	9.15	12.2	15.19
838	S	10.0	3.89	5.58	6.87	10.0	3.89	5.58	6.87	12.5	4.86	6.97	8.58
	D	4.86	3.64	4.86	6.05	12.17	9.13	12.17	15.16	9.17	6.88	9.17	11.42
914	S	8.41	3.27	4.69	5.77	8.41	3.27	4.69	5.77	10.51	4.09	5.86	7.22
	D	3.75	2.81	3.75	4.67	9.38	7.03	9.38	11.68	7.07	5.3	7.07	8.8
990	S	7.16	2.79	3.99	4.92	7.16	2.79	3.99	4.92	8.96	3.48	4.99	6.15
	D	2.95	2.21	2.95	3.67	7.38	5.53	7.38	9.19	5.56	4.17	5.56	6.93
1066	S	6.18	2.4	3.45	4.24	6.18	2.4	3.45	4.24	7.72	3.0	4.31	5.31
	D	2.36	1.77	2.36	2.94	5.91	4.43	5.91	7.36	4.46	3.34	4.46	5.55
1142	S	5.38	2.09	3.0	3.7	5.38	2.09	3.0	3.7	6.73	2.62	3.75	4.62
	D	1.92	1.44	1.92	2.39	4.81	3.61	4.81	5.99	3.62	2.72	3.62	4.51
1218	S	4.73	1.84	2.64	3.25	4.73	1.84	2.64	3.25	5.92	2.3	3.3	4.06
	D	1.58	1.19	1.58	1.97	3.96	2.97	3.96	4.94	2.99	2.24	2.99	3.72
1294	S	4.19	1.63	2.34	2.88	4.19	1.63	2.34	2.88	5.24	2.04	2.92	3.6
	D	1.32	0.99	1.32	1.64	3.31	2.48	3.31	4.12	2.49	1.87	2.49	3.1
1370	S	3.74	1.45	2.09	2.57	3.74	1.45	2.09	2.57	4.68	1.82	2.61	3.21
	D	1.11	0.83	1.11	1.39	2.79	2.09	2.79	3.47	2.1	1.57	2.1	2.61
1446	S	3.36	1.31	1.87	2.31	3.36	1.31	1.87	2.31	4.2	1.63	2.34	2.88
	D	0.95	0.71	0.95	1.18	2.37	1.78	2.37	2.95	1.79	1.34	1.79	2.22
1522	S	3.03	1.18	1.69	2.08	3.03	1.18	1.69	2.08	3.79	1.47	2.11	2.6
	D	0.81	0.61	0.81	1.01	2.03	1.52	2.03	2.53	1.53	1.15	1.53	1.91
1598	S	2.75	1.07	1.53	1.89	2.75	1.07	1.53	1.89	3.44	1.34	1.92	2.36
	D	0.70	0.53	0.70	0.87	1.76	1.32	1.75	2.19	1.32	0.99	1.32	1.65
1674	S	2.51	0.97	1.40	1.72	2.51	0.97	1.40	1.72	3.13	1.22	1.75	2.15
	D	0.61	0.46	0.61	0.76	1.53	1.14	1.53	1.9	1.15	0.86	1.15	1.43

Notes:

1. Steel conforms to ASTM A653M.
2. Section properties are in accordance with CSA-S136-07.
3. Values in row "S" are based on strength.
4. Values in row "D" are based on a deflection limit of 1/180 of the span.
5. Web crippling not included in strength values. See example calculation in notes to designer.
6. Contact the sales department for stocked colours and gauges.
7. The load table contained on this data sheet was prepared by XRS Engineered Solutions Inc., Burlington, Ontario, Canada.